

EUROPEAN UROLOGY*

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IN a rather hurried manner the leading urological clinics of Vienna, Berlin, Paris, and London have just been visited in the order mentioned.

VIENNA

There was less of urological interest in Vienna than any place visited. Blum at Sophienspital is probably the most active urologist there, but had little to show me during the week's visit other than a nephrectomy, which was performed according to the general European rule after resection of the twelfth rib. Mauritius, at the Poliklinik, has a small but interesting diagnostic service, but was doing no surgery. He has adopted the custom of giving all his cystoscopic patients an enema beforehand, employing antipyrin, 3 grains; tincture of opium, 25 drops; and water enough to make 50 cc. His experience with carcinoma has been quite discouraging, and for several years he has left advanced carcinoma of the bladder and prostate alone except for a simple suprapubic drain in cases with urinary obstruction or excessive bladder disturbance. At Hochenegg's Clinic, Die allgemeinen Krankenhaus, it was a pleasure to meet Felix Fuchs and see a number of his specimens demonstrating pyelovenous backflow in the human kidney. He is quite enthusiastic over the probable clinical significance and importance of the phenomenon of pyelovenous backflow, believing that it is responsible in many cases for obscure conditions of pain and the cause of intermittent types of infection. The cause of these two conditions, however, is not always a typical pyelovenous backflow but often, he thinks, a subcapsular effusion from the pelvic vessels or by way of lymphatics from the pelvis, but in every case associated with temporary or intermittent types of obstruction. They are also using in the urological service at Hochenegg's Clinic what they call a nitri test for *Bacillus coli* in the urine. A few drops of naphthalene alpha 10 per cent added to the urine gives a pink reaction if *Bacillus coli* are present.

BERLIN

In Berlin there is a great deal to see for one interested in urology. Von Lichtenberg, Joseph, Kaspar, Israel Jr., and Ringlieb, all have interesting services. Probably the largest urological service in the world is that of von Lichtenberg at St. Hedwig Krankenhaus. At the time of my visit he had in the hospital about two hundred urological patients—men, women, and children. In addition to this enormous service, of which he does most of the surgery himself, he is actively interested in the German urological publications, editing the *Zeitschrift* and, with C. Posner, the

Jahresbericht Über die Gesamte Urologie und ihre Grenzgebiete, in which is collected each year the complete bibliography of the world on all urological subjects, the fifth volume of which has just appeared. The only drawback to an otherwise most useful reference book is the fact that each volume is about two years late in appearing, this fifth volume containing the literature for the year 1925. Von Lichtenberg has some interesting methods in his service, a few of which may be mentioned. He performs an open operation for ureteral stricture and either resects the stricture, forming an end-to-end anastomosis afterward, or splits it widely open and places a Y-tube drain at the point of incision. He also frequently resects urethral strictures, which is not so unusual for the posterior urethra, but he treats his anterior urethral strictures in the same manner, widely resecting them, a method that is condemned by American urologists. There was one case still on his wards that had been there for one and one-half years in whom an anterior urethral stricture had been resected, and the urinary fistula still persisted. His methods of treating pyelitis and pyelonephritis are somewhat different from ours. A great many of these cases with this diagnosis were on the wards, particularly the women's wards. Forty per cent solution of urotropin in 4 cc. doses is given intravenously every two to three days, the drug also being given three times daily by mouth. Should the infection and fever persist, either a pyelostomy or nephrostomy with direct lavage is instituted. But he practically never treats his cases by ureteral catheterization and lavage and performs no ureteral dilatations per catheter. In case of ureteral stone papaverin in 10 mg. rectal suppositories is given and fluids forced. Should the stone fail to pass after a reasonable interval it is removed surgically. He is extremely conservative in his treatment of genital tuberculosis. Although he believes that the primary focus is usually in the seminal vesicle, he never performs vesiculectomy and only operates on the epididymis when abscess or fistula develops. For enlarged prostate he prefers the perineal route, although he uses both, but his perineal method is totally different from that developed by Young and his associates. He follows very much the same custom as the men in Vienna with regard to cancer of the prostate and bladder, resecting bladder tumors when possible and treating all other cases by simple suprapubic drain.

Eugen Joseph has the urological service at the University Clinic but no operative service. Von Lichtenberg is the only urologist in Berlin with a surgical service, all of the surgery at the other clinics being performed by the general surgeons. Joseph has a very active private service, however, at the Sanatorium Hygeia. He has just recently published "Die Harnorgane im Röntgenbild," giving his personal experience and methods, particularly emphasizing the diagnostic value of displacement of the kidney or ureteral shadows in case of renal tumor, the only lesion of the kidney that gives such types of displacement. Just at present he is quite enthusiastic over a new method developed at his clinic which he has called "dy-

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namoscopy," which seems to be a refinement of meatoscopy, the manner and period of emptying at the ureteral meatus of a dye that has been injected into the renal pelvis, being watched through the cystoscope. He considers that the application of dynamoscopy is of particular value after renal or ureteral stone.

The German literature is just at present enthusiastic over what promises to be an entirely new and somewhat revolutionary method of anesthesia. This new anesthetic has the trade name of "Avertin" and as yet has not been placed on the market. The manufacturers have given it out for trial and experimental use to a number of the important surgical clinics in Germany and in the *Münchener Medizinische Wochenschrift* of April 6, 1928, Straub of the Pharmacological Institute of the University of München, Hornung of the Women's Clinic at the University of Berlin, Flörcken and Mues of Frankfurt, Otto Roith of Baden-Baden, Dax and Weigand of München and Kartal of Zürich have published their experiences. In the *Medizinische Klinik* of April 5, 1928, are also published the personal experiences with "Avertin" of Nordmann of Berlin, with discussions by Amersbach of Prag, Polano of München, Vorschütz of Hamburg and Roith of Baden-Baden. Reading these reports one gets the impression that this anesthetic institutes an entirely new field in anesthesia. Its greatest recommendation is that it takes away for the patient the dread and fear of an operation as well as that of taking an anesthetic for it. The drug is given in 200 cc. of water at an average of $1\frac{1}{2}$ mg. per kg. weight (by means of a rectal tube which has a bulb so as to prevent any loss of the fluid) to the patient in bed, and is followed in fifteen to twenty minutes by a perfectly natural sleep, giving complete anesthesia with relaxation lasting for two to two and one-half hours, from which the patient awakes usually in bed after his operation without any after-effects of nausea or vomiting and without any of the acute postoperative pain, as the anesthetic effect lasts for several hours after the patient awakes. Nordmann has used it in over nine hundred surgical cases and states that he knows of no fatality following its use except for two cases mentioned by Killian, both of cancer of the pancreas. In about 30 per cent of the cases in which it has been used, however, it has had to be supplemented with general anesthetic, as the relaxation and anesthesia are complete in only about 70 per cent of the cases.

PARIS

Paris of course is a great urological center and the work of Legueu, Marion, Papin, Chevassu, Maisonet, Heitz-Boyer, Luys and several others is always interesting. Legueu was quite enthusiastic over two new things in his clinic, one a new transvesical operation for vesico-vaginal fistula and the other his so-called method of pyeloscopy. In collaboration with Fey and his radiologist at Necker, Truchot, he published last year a monograph "La Pyéloscopie." I had the privilege of seeing Truchot pyeloscope ten patients, demonstrating beautifully the physiological action of the

renal calices and pelvis in relation to the movements of the ureter. Fluoroscopic studies of the injected pelvis at the Clinique Urologique de Necker seem to demonstrate a rather independent physiologic activity of the pelvis and ureter. They lay particular stress upon the ureteral "bulb" which appears intermittently in a normal pyeloscope and, even though the method should not attain universal and practical importance, it is of great value in enabling the movements of the pelvis and ureter to be studied just as previously those of the stomach and pylorus have been.

It was also interesting to see the reaction at this clinic to the treatment of genital tuberculosis. The only surgery being performed is an occasional epididymectomy, most cases receiving no surgical treatment but being treated by ultra-violet light, for which a special room in the clinic has been provided.

Papin at Saint Joseph's Hospital is best known by his more recent advocacy of denervation for nephralgia. He has just completed a two-volume textbook on renal surgery and has almost ready for publication another two-volume book on renal tuberculosis. He is also collaborating with one of our American urologists in the publication of a two-volume book on renal anomalies.

LONDON

In London one can see very good urology performed by such leaders as Sir John Thompson-Walker, Swift Joly, Hugh Lett, Frank Kidd, Sidney McDonald, Winsbury White, etc. Thompson-Walker is the unquestioned leader of this group, being the leading suprapubic prostatectomist of England, and he performs a very finished and beautiful operation. He advocates prostatectomy early, considering two ounces of residual as an indication for it. He uses spinal anesthesia in all his cases, usually supplementing it with ether. The bladder is filled with water per urethral catheter and a long suprapubic incision made so that the whole hand can easily enter the bladder for the enucleation of the gland. With the patient in the Trendelenburg position and his special bladder retractor and the spinal anesthesia, an unusually good exposure of the bladder neck is obtained. The enlargement is enucleated en masse and then the fossa is cleaned, with scissors, of all tags or remaining nodules and the neck is sewed up with a running circular suture which seems to control hemorrhage quite satisfactorily. He places a urethral catheter as well as a suprapubic drain and rarely packs the fossa and uses no hemostatic bag. His assistant, Doctor Andrews, who has been with him a number of years, has recently analyzed his statistics and states for all cases he has a mortality of only 8 per cent and for the last two hundred cases 4.4 per cent.

Swift Joly at Saint Peter's follows Thompson-Walker's technique, but places the hemostatic bag in place of the urethral catheter. He also has a rather interesting method for urethral stricture, performing internal urethrotomy for deep strictures followed by dilatation, using a Maisonneuve urethrotome, the grooved guide of which is held by an assistant so that it firmly presses against

the roof of the urethra. He states that in none of his cases has he ever had any severe hemorrhage, but of course these cases must be followed up by prolonged dilatation just as in the method of gradual dilatation with filiforms and followers.

The London urologists are at present all interested in technical methods and development of new instruments, and have an excellent assistant in the head of the Genito-Urinary Manufacturing Company, almost all of the men having their own particular pet instruments carrying their own names, the diathermy punch of Kenneth Walker, and the diathermy cystoscope of Kidd deserving particular mention.

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HUMAN SEXUAL STERILIZATION*

A CONTRIBUTION TO THE STUDY OF THE PROBLEM

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THE sterilization of the mentally diseased makes it possible to curtail their ever-increasing number. Considering both scientific and humanitarian points of view, sterilization is one of the most valuable means for not only improving the human race and protecting its welfare, but also decreasing the number of unfortunates to be born to suffer intensely all their lives for faults not their own.

Of course, every physician at one time or another has to resort to some form of sterilization in cases where pregnancy would be dangerous to the life of the woman on account of pulmonary tuberculosis, other constitutional diseases or defects, or of repeated cesarian section necessitated by one cause or another.

SOME CRUDE METHODS OF STERILIZATION

A crude way to sterilize is to deprive the male of his testicles. We do not know how old this method is, but there is evidence of its having been practiced in the time of Plato, as a form of punishment of criminals, a purpose entirely different from those of modern times.

As a result of this castration, the man loses all sexual desire, becoming incapable of sexual intercourse, while his masculine characteristics are modified to a feminine pattern. The hair on his face tends to disappear, and his breasts develop glandular tissue, provided the castration be performed either before or in his middle age.

In the case of women, a crude method of sterilization is the removal of the uterus or of the ovaries. In the latter event, of course, the effect upon the subject is analogous to that upon the male upon removal of testicles: if the operation is performed before, or in middle age, the voice becomes masculine, there is a marked increase of hair upon the face, the breasts atrophy, and menstruation ceases. Removal of the uterus is a serious and an unnecessary operation for sterilization. It is justified only when the organ itself

is diseased. Besides, we cannot wholly neglect the fact that the uterus has an internal secretory function, however small.

NEWER METHODS

The next step in the history of human sterilization was an effort to avoid mutilation and the undesirable results of removal of sex organs as above mentioned.

The x-ray and radium have been tried with this end in view. Although with their use there is no mutilation, the final results produced by them are similar to and as obnoxious as those of castration. The x-ray and radium destroy the sexual endocrines, thus depriving the subject of sexual desire and producing early menopausal changes. Of course at the time of, or near the menopause there would be no objection to the use of x-ray or radium, but at this period of life there is no need for sterilization.

In recent years some experimental work has been done in the sterilization of female rats and rabbits with some encouraging results, by the subcutaneous injection of spermatozoa or testes extract.

Extracts of ovaries have also been used, large doses of which inhibit the development of follicles in female rabbits, and the latter do not admit the male.

Perhaps some day we may be able to render an individual permanently or for definite periods of time, immune to fertilization by immunization, just as we protect persons against smallpox.

SIMPLE AND SAFE SURGICAL METHODS

The best methods for the sterilization of human beings in use today are surgical, but not those involving the removal of any generative organs nor producing changes that alter the subject's sexual life and general physical characteristics.

As a result of the safe and simple surgical methods now in vogue, patients are merely unable thereafter to fertilize or to become fertile.

STERILIZATION LEGALIZED—STATISTICS FOR CALIFORNIA

These later methods of sterilization have been legally adopted in some twenty-three states in this country, with certain limitations, not only as an eugenical, but also as a therapeutic measure to be employed in the treatment of patients of state institutions for the mentally deficient.

The California Sterilization Law was adopted in 1909. The total number of operations performed to May, 1927, was somewhat in excess of five thousand, which is four times the number performed in all the rest of the world, as far as we know, for eugenical reasons in state or governmental institutions.

MORE TO BE DONE

We hope that the time will come when we shall sterilize also those mental defectives who are not sent to state hospitals, because the public thinks of them as "harmless," and classifies them as "just bums," "eccentrics," or "queer people." From the point of view of the psychiatrist, they, too, are "insane," and are a menace to race betterment,

*This paper received honorable mention in the Research Prize competition of the California Medical Association, April 30, 1928.